AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method of forming a mechanical joint, comprising:

molding a studded ball movably within a desired structure to form the mechanical joint, wherein the studded ball is configured for coupling to a desired mechanical linkage; and

centering the studded ball within the desired structure, wherein centering comprises abutting first and second centering portions of first and second mold structures against the desired structure and the studded ball, respectively.

2. (Original) The method of claim 1, wherein molding comprises molding in place the studded ball in the desired structure.

3. (Original) The method of claim 1, wherein molding comprises self-retaining the studded ball within the desired structure.

4. (Original) The method of claim 3, wherein self-retaining comprises injecting mold material into a ball socket about the studded ball.

5. (Original) The method of claim 1, wherein molding comprises self-tolerancing the studded ball within mold material disposed about the studded ball.

6. (Original) The method of claim 5, wherein self-tolerancing comprises reducing mold contraction about, and fixation to, the studded ball.

7. (Currently Amended) ~~The~~ A method of forming a mechanical joint, comprising: ~~claim 1,~~

molding a studded ball movably within a desired structure to form the mechanical joint,

wherein molding comprises creating a temperature differential ~~between~~ in which the studded ball ~~and~~ is hotter than the desired structure.

8. (Original) The method of claim 7, wherein creating the temperature differential comprises heating the studded ball.

9. (Original) The method of claim 7, wherein creating the temperature differential comprises cooling the desired structure.

10. (Original) The method of claim 7, wherein creating the temperature differential comprises solidifying mold material from the desired structure inwardly to the studded ball.

11. (Original) The method of claim 1, wherein molding comprises providing a desired mold layer about the studded ball.

12. (Original) The method of claim 11, wherein providing the desired mold layer comprises symmetrically positioning the studded ball within the desired structure.

13. (Original) The method of claim 11, wherein providing the desired mold layer comprises positioning a spring-loaded mold assembly about opposite open portions of the desired structure.

14. (Original) The method of claim 13, wherein positioning the spring-loaded mold assembly comprises abutting centering structures against the studded ball and the desired structure.

15. (Canceled)

16. (Canceled)

17. (Currently Amended) The method of claim ~~16~~1, wherein abutting the first centering portion comprises disposing a mold injection nozzle sealingly against a first open portion of the desired structure.

16 18. (Currently Amended) The method of claim ~~17~~1, wherein molding comprises injecting mold material and simultaneously pressuring the studded ball against the second centering portion.

17 19. (Original) The method of claim 16 18, wherein injecting mold material and simultaneously pressuring comprises sealing the studded ball against the second centering portion.

18 20. (Currently Amended) The method of claim ~~18~~1, wherein molding comprises retracting at least one of the first and second centering portions prior to solidification of the mold material.

19 21. (Original) The method of claim 1, wherein molding comprises forming a plurality of molded in place layers about the studded ball.

20 22. (Original) The method of claim 19 21, wherein forming the plurality of molded in place layers comprises forming at least one low friction layer adjacent the studded ball.

21 23. (Original) The method of claim 1, comprising molding a ball onto a stud to form the studded ball.

22 24. (Currently Amended) A molding method for a mechanical joint, comprising:

injecting mold material into a cavity between a studded ball and a support structure for the studded ball;

centering the studded ball within the support structure, wherein centering comprises abutting first and second centering portions of a symmetrical mold assembly against the support structure and the studded ball, respectively; and

self-tolerancing the studded ball movably within the mold material.

25. (Canceled)

26. (Canceled)

27. (Currently Amended) The molding method of claim ~~26~~24, wherein injecting comprises injecting mold material into the cavity adjacent the first centering portion and simultaneously forcing the studded ball against the second centering portion via fluid pressure of the injected mold material.

28. (Original) The molding method of claim 27, wherein simultaneously forcing the studded ball comprises fluidly sealing the studded ball against the second centering portion.

29. (Original) The molding method of claim 24, wherein injecting comprises automatically retaining the studded ball within the support structure.

30. (Original) The molding method of claim 29, wherein automatically retaining comprises solidifying mold material about the studded ball and into a socket in the support structure.

31. (Currently Amended) The molding method of claim 24, wherein self-tolerancing comprises facilitating heat transfer between the studded ball and the support structure via a temperature differential in which the support structure is cooler than the studded ball.

32. (Original) The molding method of claim 31, wherein facilitating heat transfer comprises cooling the mold material inwardly from the support structure to the studded ball.

33. (Original) The molding method of claim 24, wherein injecting mold material comprises molding in place the studded ball in the support structure.

34. (Original) The molding method of claim 24, wherein injecting mold material comprises forming at least one molded in place layer having a low friction surface adjacent the studded ball.

Please add the following new claims:

52. (New) A method of forming a mechanical joint, comprising:

centering a studded ball;

positionally centering a desired structure; and

injecting mold material between the studded ball and the desired structure.

53. (New) The method of claim 52, wherein centering and positionally centering comprise abutting first and second centering structures against the desired structure and the studded ball, respectively.

54. (New) The method of claim 53, wherein abutting comprises:

engaging the first centering structure against the desired structure at a first end of the desired structure; and

contacting the second centering structure against the studded ball adjacent a second end of the desired structure.

55. (New) The method of claim 53, wherein abutting comprises biasing the first and second structures inwardly toward one another.

56. (New) The method of claim 52, wherein injecting comprises molding comprises molding in place the studded ball in the desired structure.

57. (New) The method of claim 52, comprising positioning a spring-loaded mold structure at an open portion of the desired structure.

58. (New) The method of claim 52, where injecting mold material comprises pressurably biasing the studded ball toward a centering structure.

59. (New) A method of forming a mechanical joint, comprising:

providing a studded ball in an oversized socket;

creating a temperature differential in which the temperature of the studded ball is greater than the temperature of the socket; and

injecting mold material into the oversized socket about the studded ball.

60. (New) The method of claim 59, wherein creating the temperature differential comprises heating the studded ball.

61. (New) The method of claim 59, wherein creating the temperature differential comprises cooling the oversized socket.

62. (New) The method of claim 59, wherein creating the temperature differential comprises facilitating cooling of the mold material from the oversized socket inwardly to the studded ball.

63. (New) The method of claim 59, wherein creating the temperature differential comprises reducing contraction of the mold material onto the studded ball during solidification.